

CLAIMS

1. A sampling pattern covering an array of pixels for use in an anti-aliasing system, where each pixel has a pattern of sample points at one or more than one mirror plane within the array of pixels, characterized in that the sample point pattern of each pixel is a mirror image and different from the pattern of a directly neighboring pixel.
- 10 2. The sampling pattern according to claim 1, wherein the mirror planes are located on the edges of the pixel.
- 15 3. The sampling pattern according to claim 1 or 2, wherein the pattern has one sample point per pixel mirror plane.
- 20 4. The sampling pattern according to claim 1 to 3, wherein the (x, y) coordinates of the sample points for a pixel are related according to (0, a), (a, 1), (b, 0), and (1, b).
- 25 5. The sampling pattern according to claim 1 to 3, wherein the (x, y) coordinates of the sample points for a pixel are related according to (0, b), (a, 0), (b, 1), and (1, a).
- 30 6. The sampling pattern according to claims 4 or 5, wherein the sum "a+b" is in the range 0,5 - 1,5.
7. The sampling pattern according to claims 4-6, wherein $a = 1/3$ and $b = 2/3$.
- 35 8. The use of a sampling pattern according to any of claims 1-7 in a pixel anti-aliasing system.

9. The use of a sampling pattern according to claim 8 for processing a still image.

10. The use of a sampling pattern according to claim 5 8 for processing a video sequence.

11. A method for creating a sampling pattern covering an array of pixels for use in an anti-aliasing system, where each pixel has a pattern of sample points at the 10 edges of the pixel, characterized by

defining the sample point pattern of each pixel so that it is a mirror image and different from the pattern of a directly neighboring pixel

15 12. The method according to claim 11, wherein the pattern has one sample point per pixel edge

13. The method according to claim 11 or 12, wherein the (x, y) coordinates of the sample points for a pixel are 20 related according to (0, a), (a, 1), (b, 0), and (1, b).

14. The method according to claim 11 or 12, wherein the (x, y) coordinates of the sample points for a pixel are related according to (0, b), (a, 0), (b, 1), and (1, a).

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15. The method according to claims 13 or 14, wherein the sum "a+b" is in the range 0,5 - 1,5.

16. The method according to claims 13 to 15, wherein 30 a = 1/3 and b = 2/3.

17. An anti aliased image created by processing an image according to any of the steps 11-16

18. An anti-aliasing system comprising a GPU, wherein the GPU is adapted to define a pattern of sample points at the edges of a pixel, characterized in that

5 the GPU is adapted to define the sample point pattern of each pixel so that it is a mirror image and different from the pattern of a directly neighboring pixel

19. The system according to claim 18, wherein the GPU is implemented in hardware.

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20. The system according to claim 18, wherein the GPU is implemented in software.

21. The system according to claims 18 to 20, wherein
15 the (x, y) coordinates of the sample points for a pixel are related according to (0, a), (a, 1); (b, 0), and (1, b).

22. The system according to claims 18 to 20, wherein
20 the (x, y) coordinates of the sample points for a pixel are related according to (0, b), (a, 0), (b, 1), and (1, a).

23. The system according to claims 21 or 22, wherein the sum "a+b" is in the range 0,5 - 1,5.

25 24. The system according to claims 21 to 23, wherein
a = 1/3 and b = 2/3.

25. A computer program product directly loadable into an internal memory associated with a CPU, said CPU being
30 operatively coupled to a GPU for defining a pattern of sample points at the edges of a pixel, comprising program code for

defining the sample point pattern of each pixel so that it is a mirror image and different from the pattern of
35 a directly neighboring pixel

26. A computer program product as defined in claim 22, embodied on a computer-readable medium.